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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,484	01/10/2001	Joseph C. Chan	80398.P347	9336
7590	01/12/2005		EXAMINER PEZZLO, JOHN	
Firasat Ali BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP Seventh Floor 12400 Wilshire Boulevard Los Angeles, CA 90025-1026			ART UNIT 2662	PAPER NUMBER

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application N .

09/758,484

Applicant(s)

CHAN ET AL.

Examiner

John Pezzlo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,6,7,9,12,13,15-17,19,20,22,23,25,27-29,31-33,35 and 36 is/are rejected.
- 7) ☐ Claim(s) 2,4,5,8,10,11,14,18,21,24,26,30 and 34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

I. Claims 1, 7, 13, 25, 28, 29, 32, 33, and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Rathonyi et al. (US 6,359,877 B1) hereinafter Rathonyi.

1. Regarding claims 1, 7, and 13 – Rathonyi discloses generating a metric (number of re-transmitted packets), which is based on the estimated error rate and processing the metric to determine the optimal packet size and sending the selected packet size to the transmitter, refer to column 11 lines 13 to 27.

2. Regarding claims 25, 29, and 33 – Rathonyi discloses storing a radio link protocol packet (RLC) and predetermining the packet size by empirical experimentation (a continuous measurement algorithm), refer to column 5 lines 59 to 63 and column 6 lines 53 to 57 and column 11 lines 13 to 27.

3. Regarding claims 28, 32, and 36 – Rathonyi discloses that the packets include a CRC bits used to provide an error checking capability, refer to column 11 lines 13 to 27 and column 11 lines 63 to 67 and column 12 lines 1 to 18.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

II. Claims 3, 6, 9, 12, 15, 16, 17, 19, 20, 22, 23, 27, 31, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rathonyi (same as above).

1. Regarding claims 3, 9, 15, 17, 20, 23, 27, 31, and 35 – Rathonyi discloses determining the optimal packet size based on transmission errors, refer to column 11 lines 13 to 27.

Rathonyi does not expressly disclose utilizing a look-up table to select the packet size.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize a look up table to elect the packet size. The suggestion/motivation for doing so would have been that Rathonyi discloses a continuous measurement algorithm wherein a processor evaluates the current packet size and the processor could easily select the packet size

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using a stores data base such as a look up table for the optimal packet size. The benefit being that a stored table offers the processor easy access and is a simple method easy to implement in electronic circuitry.

2. Regarding claims 6 and 12 – Rathonyi discloses determining the optimal packet size based on transmission errors, refer to column 11 lines 13 to 27.

Rathonyi does not expressly disclose that the estimated error rate is based on the frame error rate.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize frame error rate as the metric to select the optimal packet size. The suggestion/motivation being that Rathonyi discloses using CRC check bits to determine packet errors, therefore utilizing frame error rate could easily be the metric in which to base the selection of the packet size. The benefit being that the frame error rate is formed from the packet error rate and gives a more steady state view of the network conditions rather than varying the packet size on transient situations.

3. Regarding claims 16, 19, and 22 – Rathonyi discloses determining the optimal packet size based on transmission errors, refer to column 11 lines 13 to 27.

Rathonyi does not expressly disclose estimating likelihood of packet transmission errors in a system.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to estimate the likelihood of packet transmission errors in order to provide a packet size at the

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start up of the system. The suggestion/motivation for doing so would have been that Rathonyi discloses a continuous measurement algorithm however at the start up of the system prior to the collection of data a method is needed to establish the packet size and estimating likelihood of packet transmission errors in a system is a practical way of doing the selection. The benefit being that the system starts up in a near optimum state.

### ***Response to Arguments***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Applicant's arguments with respect to claims 1, 3, 6, 7, 9, 12, 13, 15-17, 19, 20, 22, 23, 25, 27-29, 31-33, 35 and 36 have been considered but are moot in view of the new ground(s) of rejection.

### ***Allowable Subject Matter***

Claims 2, 4, 5, 8, 10, 11, 14, 18, 21, 24, 26, 30, and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Mansfield (US 6,704,346 B1) discloses a method and apparatus to provide improved microwave interference robustness in RF communications devices..
2. Flammer, III et al. (US 6,480,497 B1) discloses a method and apparatus for maximizing data throughput in a packet radio mesh network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pezzlo whose telephone number is (571) 272-3090. The examiner can normally be reached on Monday to Friday from 8:30 AM to 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C.

or faxed to:

(703) 872-9306

For informal or draft communications, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

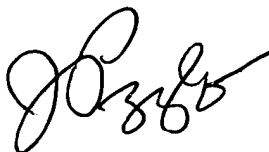
Jefferson Building

500 Dulany Street

Alexandria, VA.

John Pezzlo

10 January 2005

  
JOHN PEZZLO  
PRIMARY EXAMINER